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### (54) Lead-in arrangement for a shower-bath

(57) The lead-in arrangement for a shower-bath according to the invention provides for the use of a hide-away lead-in means (24) for the flexible hose (28) connecting the hand-held portion (22) of the shower with the water supply installation.

Preferably, said hide-away lead-in means (24) is provided in one of the attachment means of the rod (14) along which the support means (16) for the hand-held portion (22) of the shower is capable to slide.

This solution offers definite convenience and practical advantages as compared to prior-art ones, in which the flexible hose is hanging freely inside the shower booth.

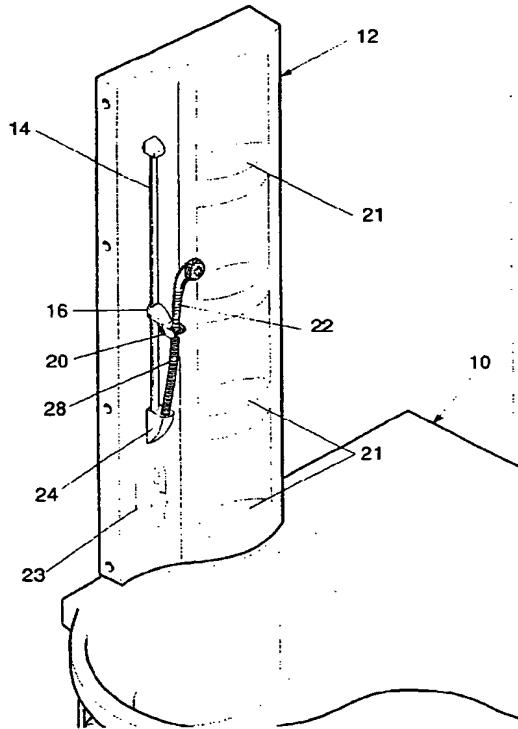


Fig. 1

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## Description

The present invention refers to a lead-in arrangement for a shower-bath capable of being used in conjunction with shower booths either self-contained or associated with bath-tubs or the like.

The hand-held portion of a shower arrangement is commonly known to be connected to the water delivery installation through a hose contained in a flexible metal or plastic sheathing. It is further usually associated to a support means which is usually slidable vertically and adjustable in its position, so as to support said hand-held portion in its resting and/or use positions.

Such a prior-art solution has many drawbacks. As a matter of fact, the flexible sheathed hose remains constantly hanging in the shower booth, thereby taking up space inside the same shower booth and interfering with the movements of the user; furthermore, it can most easily get caught in the shower controls (ie. water faucets, fittings and the like) arranged on the wall of the shower booth. Last, but not least, it can rub against the walls of the shower booth, thereby damaging them and, in particular, leaving marks and scratches on them which prove very difficult or even impossible to remove.

It would therefore be desirable, and it is in fact a main purpose of the present invention, to eliminate such drawbacks by in particular preventing such rubbing action of the sheathed hose from taking place, while maintaining the same hose constantly in a correct position.

The solution according to the present invention lies in providing a hide-away guidance arrangement for the flexible sheathed hose of the shower, so as to constantly keep such a hose in a vertical position at a distance from the walls of the shower booth, as herein described and claimed.

Characteristics and advantages of the present invention will be more readily understood from the description that is given below by way of non-limiting example with reference to the accompanying drawings, in which:

- Figure 1 is a perspective, schematic view of a shower booth associated to a bath-tub or a whirlpool and provided with an arrangement according to the present invention;
- Figure 2 is a perspective, schematic view of the detail of the lead-in arrangement for the flexible shower hose according to the present invention; and
- Figure 3 is the view of a variant of the arrangement shown in Figure 2.

As illustrated in Figure 1, a bath-tub or whirlpool 10 is associated to a shower upright element 12 attached to the edge of the same tub. Said shower upright element 12 is provided with a vertical rod 14 on which a sleeve 16 is mounted slidably. Said sleeve 16 can be locked in position at any desired height along the rod 14 by means

of locking means 18, which are preferably of the friction type and of any generally per se known type (see Figure 2). A support means 20 is further associated to the sleeve 16 so as to sustain the hand-held portion 22 of the shower arrangement.

Shelves 21 to accomodate utility items are provided on said upright element 12, on which also the water control fittings 23 are mounted in the usual manner.

According to the present invention, the lower end portion of the rod 14 is fixed to the upright element 12 by means of a block 24 which is provided with a through-conduit 26, preferably in an elbow-like form, in which the flexible hose 28 connecting the hand-held portion 22 of the shower with the water supply is slidably inserted. When at rest, the end portion of the flexible hose for connection with the water supply is fully inserted in the block 24 and in a recess provided on the rear side of the upright element 12.

Therefore, as can be seen in the Figures, the flexible hose 28, when not in use, remains in a correct vertical position, without any portion thereof hanging freely on the outside of the wall of the shower booth. The afore cited drawbacks that are commonly found in prior-art shower-baths are in this way eliminated.

When using the shower, the user gets hold of the hand-held portion 22 thereof and, after having released and removed it from its support 20, draws it towards himself or herself and, by doing so, pulls at the same time the required length of flexible hose out from the block 26. After having taken his or her shower, the user causes the flexible hose 28 to slide again into the block 26, thereby causing the same hose to hide away, and then hangs the hand-held portion 22 of the shower again on its support 20. Two further positions in which said hand-held portion 22 of the shower can be locked are illustrated with dashed lines in Figure 2.

Figure 3 illustrates an alternative solution to the embodiment shown in Figure 2, whereas the same reference numerals are used to indicate elements and items that are common to both solutions.

The solution illustrated in Figure 3 differs from the previously described one for the fact that the block 24 acting as a hide-away guidance arrangement for the flexible hose 28 is formed by the upper support element (instead of the lower one) of the rod 14. Such a solution has essentially the same characteristics as the previously described one, while however offering the additional advantage that, when the shower is being used, water cannot seep into the block 24, thereby preventing possible leaks to the rear of the upright element 12 from occurring.

In this particular embodiment of the present invention, in the recess on the back side of the wall of the shower booth there is provided a further fixed or rotatable guidance arrangement 30 for the flexible hose 28. It may additionally prove adequate to provide a counterweight 32 to be fixed in a suitable position to the hose 28 (as shown in Figure 3) so as to facilitate the sliding of the

hose 28 into its hide-away recess and ensure its correct tension.

It will be appreciated that the embodiments that have been described above by way of example may be the subject of many modifications and additions without departing from the scope of the present invention as recited in the appended claims. For instance, the support means 20 can be mounted in a swivelling manner on the sleeve 16, so as to enable the shower to be taken even in a fixed position, ie. with the hand-held portion 22 thereof hooked onto its support 20. Furthermore, the block 24 has been described as preferably representing one of the elements for the attachment of the rod 14 and, at the same time, for guiding the insertion of the flexible hose 28 into its hide-away recess. It will however be appreciated that these two functions may also be provided separately, ie implemented in two distinct elements.

#### Claims

1. Lead-in arrangement for a shower-bath, either individual or associated with a bath-tub or similar equipment, comprising an upright element (12) to which there is fixed a vertical rod (14) on which there is slidably mounted a sleeve (16) provided with friction means (18) for locking said sleeve in any suitable, adjustable position along the rod, the hand-held portion (22) of the shower arrangement being connected to the water supply installation by means of a flexible hose (28) and being further capable of being hooked on to and released from the sleeve (16), **characterized in that** the flexible hose (28) is adapted to slide into a block (24) attached to said upright element (12), wherein said block (24) is provided with a through conduit (26) communicating with a recess provided on the rear side of said upright element (12).
2. Lead-in arrangement for a shower-bath according to claim 1, **characterized in that** said through conduit (26) of the block (24) is appropriately given a curvilinear shape.
3. Lead-in arrangement for a shower-bath according to claim 1 or 2, **characterized in that** said block (24) acts also as one of the attachment means for fixing said rod (14) to said upright element (12).
4. Lead-in arrangement for a shower-bath according to any of the preceding claims, **characterized in that** said block (24) is the upper attachment means for the rod (14), a further lead-in element (30), either fixed or rotatable, being provided in the recess on the rear side of the upright element (12) for the flexible hose (28).
5. Lead-in arrangement for a shower-bath according to claim 4, **characterized in that** a counterweight

means (32) is associated to the flexible hose (28) for tensioning the same hose.

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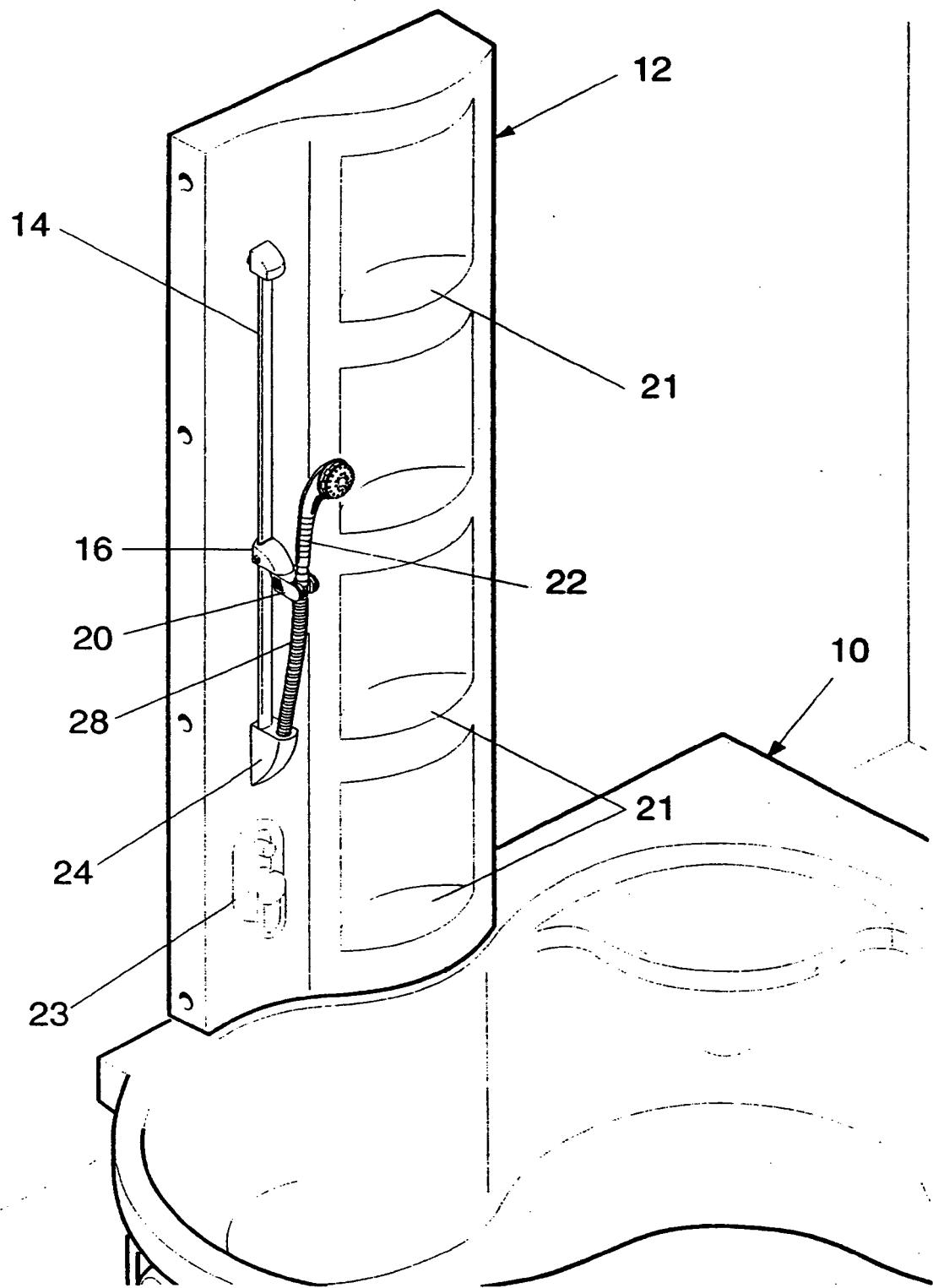


Fig. 1

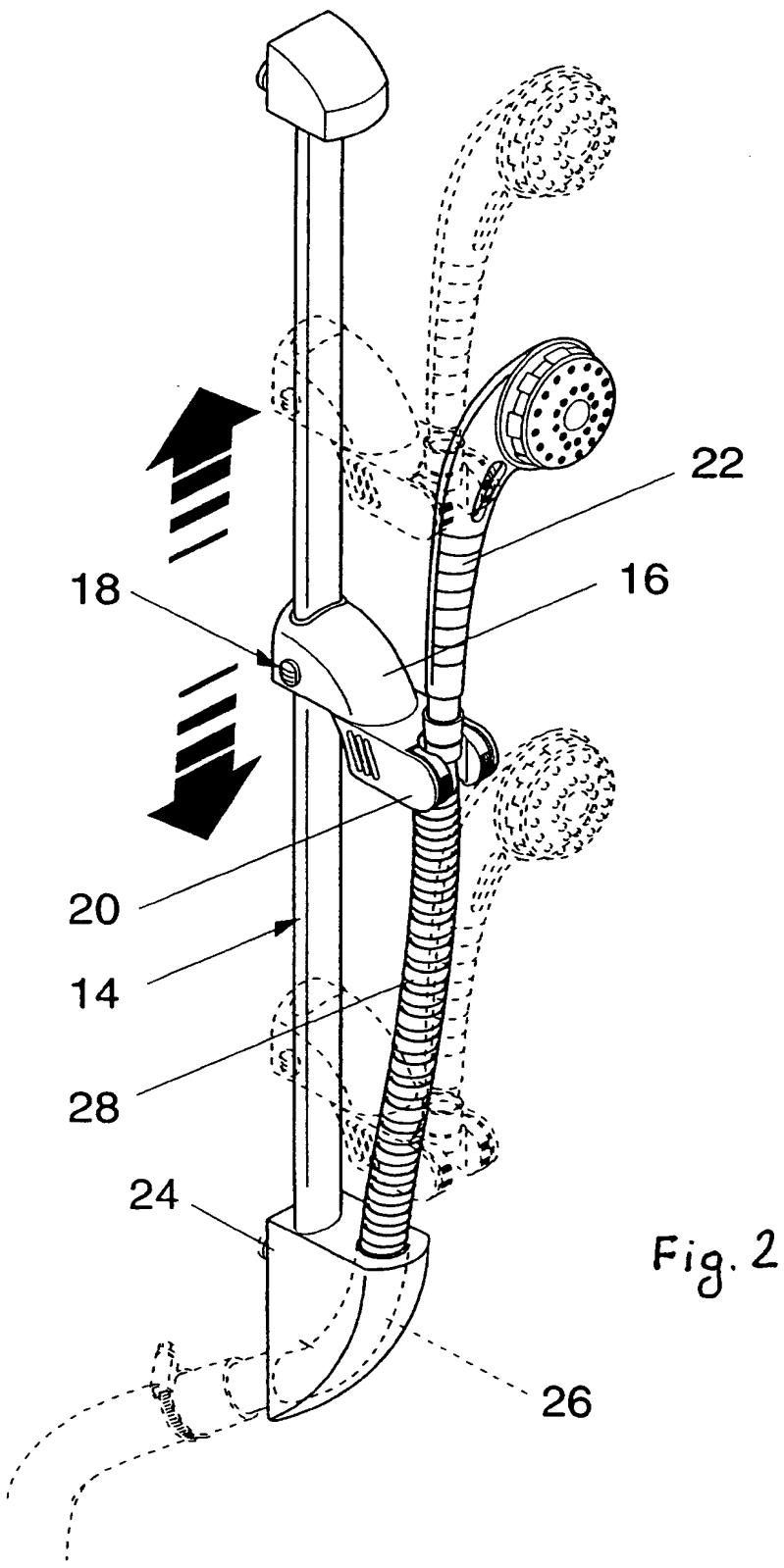


Fig. 2

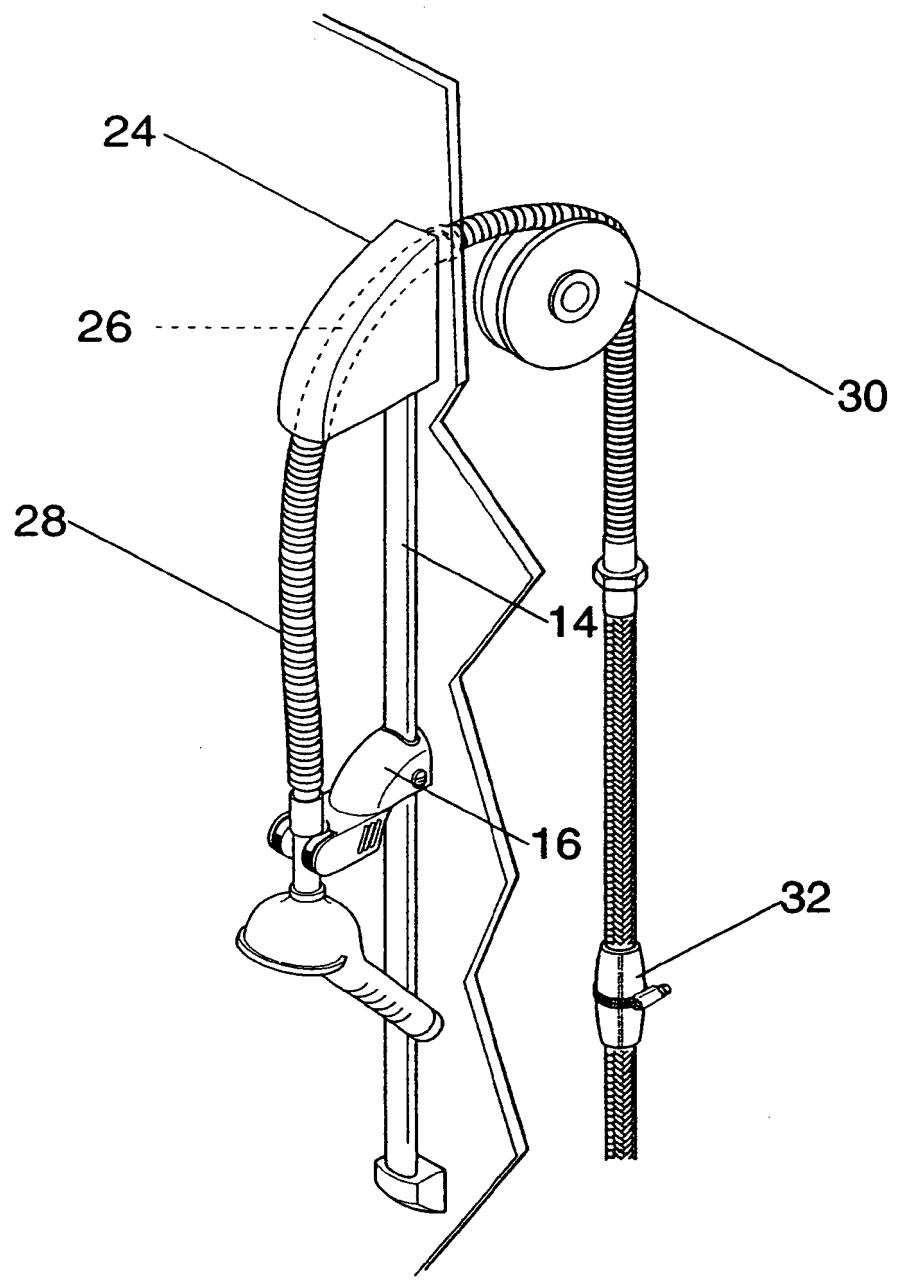


Fig. 3



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## EUROPEAN SEARCH REPORT

Application Number  
EP 95 11 4174

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	DE-U-85 06 749 (HANS GROHE GMBH) * page 6, paragraph 7 - page 8, paragraph 1; figures 1-3 *	1-3	E03C1/06
Y	---	4,5	
Y	DE-C-688 202 (JUNKERS & CO GMBH) 15 February 1940 * the whole document *	4,5	
A	GB-A-1 003 630 (DORNBIEKER) 8 September 1965 * the whole document *	1,2	
A	WO-A-92 21829 (MARIELLE) * figure 1 *	1	
A	GB-A-2 220 567 (CARADON MIRA LIMITED) * figures *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			E03C
<p>The present search report has been drawn up for all claims</p>			
Place of search  THE HAGUE	Date of completion of the search  5 January 1996	Examiner De Coene, P	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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